

The Australopithecinae are described in considerable detail. The term is used, as a temporary device, to include the whole collection of South African hominoid fossils to avoid confusion while the taxonomy of the various groups is still subject to uncertainty. The view is expressed, however, that the anatomical differences between the fossils found in the Transvaal are not sufficient to justify generic distinction. Sir Wilfrid considers that, as between the Pongidae and the Hominidae, the Australopithecinae must be allocated to the latter. In arriving at this conclusion use is made of the formulated provisional definition of the Hominidae which must be considered in association with the formal definition of the Pongidae. Accepting these definitions, and a strong case is made out for them, it is concluded that the Australopithecinae must be allocated to the family Hominidae. As is pointed out the only other interpretation is that the South African group of fossils represent a third radiation of the superfamily Hominoidea which shows remarkable parallelism to the Hominidae. 'But such an interpretation would be wholly gratuitous, with no supporting evidence, and it would demand a degree of evolutionary parallelism far beyond anything that has been demonstrated to have occurred in any other mammalian sequence of evolution.' While the Australopithecinae, however, are to be regarded as 'hominids in the taxonomic sense the terms "man" and "human" can hardly be applied to them, for there is no certain evidence that they possessed any of the special attributes which are commonly associated with human beings'. With this view of the *significance* (of their *importance* there can be no doubt at all) of the Australopithecinae, as is well known, there is not universal agreement. The author's clear and precise statement of his views is, therefore, most important, for no one can now have any doubts on the reasons that have led Sir Wilfrid to his conclusion that the South African fossils deserve hominid status; that, in fact, in the Villafranchian period 'there existed primitive hominids with a cranial capacity exceeding by very little that of the large anthropoid apes but with a limb structure evidently related to the development of an erect posture and gait which is so marked a characteristic of the evolutionary sequence of the Hominidae in general'.

The last chapter is concerned with the origin of the Hominidae. Some brief attention is given to the fossil history of the Hominoidea, and it is suggested that the Hominidae and the Recent Pongidae may well have had a common ancestry as late as the Early or Middle Miocene and possibly even later. Opposing trends in adaptation to posture and gait were associated with the subsequent divergence that accompanied the phylogenetic separation of the Hominidae from the Pongidae. This provisional interpretation will obviously stand or fall by the manner in which it is supported by future fossil finds. Meanwhile, the author's status and experience will ensure it a sympathetic reception.

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*Blood Supply and Anatomy of the Upper Abdominal Organs.* By NICHOLAS A. MICHELS, M.A., D.Sc. (£8. 0s. 0d.) London: Pitman Medical Publishing Co. Ltd. 1955.

The variability in the arrangement of the vessels in the upper abdomen has long been noted by anatomists and surgeons, and Belou, Thompson, Flint and many others have reviewed and added to the legion of reported anomalies. Now Prof. Michels has collated the available information and, as a result of many years spent in careful dissections of over 500 subjects, besides studies of other specially injected preparations of the liver and bile ducts, he has added greatly to our knowledge of upper abdominal vascular variations and their significance. The numerous illustrations are admirably clear and informative, although a monograph of this type, loaded with vascular details, is not always easy to read, and the work will find its chief use as a work of reference rather than as a text for routine study. Considering the title there are some curious but interesting interpolations on, for example, dyskinesia, hepatoscopy and religious rites, the history of the first cholecystectomy in America, the incidence of gall stones in various diseases, and so on. The actual descriptions of the upper abdominal viscera are not up to the standard of the discussions of the arteries, the veins receive relatively little attention, and the nerves are ignored apart from those innervating the sphincter of Oddi. However, these are minor criticisms of what is undoubtedly a major contribution to this field of regional angiology.

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